LPRSA – 17 Mile RI/FS
Technical Meeting Series Agenda
Meeting 2 - March 6th, 2014
K&L Offices, One Newark Center, 10th Floor, Newark, NJ

Time	Agenda Item	Presenter
10:00 - 10:15	**Welcome/Workshop Agenda** - Opening comments	EPA and CPG
10:15 - 11:30	**Characterization - Data Summary** - Sediment - Co-Location of Dioxin and other COPCs	CPG
11:30 – 12:30	**Human Health Risk Assessment** - COPCs and Toxicity Values - Defining EA(s) and EPC(s) - RME calculations	CPG
12:30 - 1:00	**Lunch Break**	
1:00 – 2:00	**Ecological Risk Assessment** - Wildlife ERA o COPC selection, o EAs and EPCs, and process for effects/exposure parameters.	CPG
2:00 – 2:30	**Feasibility Study** - Remedial Action Levels	CPG
2:30- 3:30	**Feedback and Open Discussions** - Summary of key issues/areas of concern - Identification of follow up actions, as necessary	EPA, CPG, Partner Agencies

Suggested Ground Rules for Communication among meeting attendees:

- Speak one at a time.
- Express your own views.
- No personal attacks.
- Avoid grandstanding and filibustering.
- Stay on track with the agenda.
- Communicate openly and clearly.
- If you're recording, please let others know.

Notes – 3/6/14

RI Sediment Data Set

RM6-10 concs are higher in shoals than channel for 2378TCDD, PCB, DDx, mercury, copper, lead Dieldrin & chlordane, not as much difference in shoals vs. channel

Correlated with 2378TCDD (with depth->0-2.5 ft):

- PCB strong correlation in LPR, surface & depth (upstream of RM12 to above Dam, data do not correlate as well)
- DDx strong correlation in LPR, surface & depth
- Dieldrin positive correlation, but more scatter
- Chlordane, less strong correlation
- Mercury strong correlation
- Copper less strong
- Lead less strong

Greater longitudinal correlation in concentrations than latitudinal (contaminants tend to move along flow rather than across channel).

CSM for RM10.9 is that mudflat built up to equilibrium in 1960s (don't believe it built up then surface got swept away, leaving older materials exposed)

CPG calls 50ppt 2378TCDD extremely low concentration.

Mapping:

- For lower 7.5 miles, divide channel vs shoal & shoals are divided into zones that erode or don't erode
- For river above RM7.5, break river into channel vs. left shoal vs right shoal & ID silt deposits
    - Don't allow channel data point to say anything about shoal concentration, don't allow silt deposit data point to say anything about channel concentration.

Human Health Risk Assessment

Focusing on surface sediments (0-15 cm) located in nearshore & mudflat areas ("accessible surface sediment")

- CPG to send locations of data points used.

Screened out inhalation pathway

For TCDD TEQ, EPA would use 150,000 mg/kg-day – Marian to provide info on why. It is HEAST value, based on tumors. CPG has concerns with HEAST value, because of change in way tumors were classified?

Kubiak asks about linking PAHs to dioxin TEQ values? CPG & NJDEP say they have never seen it done that way.

Sediment: Divided river into 6 segments (RM0-3, 3-6, 6-9, 9-12, 12-15, 15-17.4)

- Also looked at hot spots as own exposure area

Tissue EPCs:

- Selected larger species (part of EPA-approved compositing plan)

Olsen/Cullen have concern that CPG has 2 RMEs (with & without carp)

- Make decision based on one RME (including carp and other species of fish)
- Discuss single species consumers in uncertainty section instead
- CPG to provide risk assessments at other sites that discussed multiple RMEs in baseline risk assessment (not in uncertainty section) – Portland Harbor, Lower Duwamish

CPG has not done probabilistic risk assessment

- Point risk assessment to be submitted in April.
- CPG discusses some of findings of creel angler survey in uncertainty section.
- Homeless discussed qualitatively in uncertainty section.

Included all data in EPCs, did not exclude anything based on being outlier.

<u>BERA: Wildlife Assessment</u>

Mink: calculated 100% of diet from river and 0% of diet from river, because part of its diet is from terrestrial and there is no data on terrestrial food source contamination.

Calculated site wide EPCs vs. 2-mile segments EPCs

Belted Kingfisher – evaluated EPCs above RM6 and for whole river – didn't make a difference.

Mink habitat analysis limited area of exposure to above RM10

<u>Remedial Action Levels</u>

PRGs are not always expressed as sediment concentrations, so how do you relate sediment remediation goals to fish risk reduction goals?

Active remediation of areas above RALs achieves near-term risk reduction, followed by natural recovery to achieve ultimate risk reduction goals.

Development of RALS considers tradeoffs among immediate risk reduction, longer-term recovery, scale and implementability of remedies, duration and cost.

May have many RALs within a site. RALs are specific to the area to be remediated.

NJDEP: Need more detail on how RALs will be developed and how RALs relate to PRGs.

500ppt 2378TCDD is RAL for Sustainable Remedy.

Other sites have used more rigorous & less rigorous tying of RALs to risk levels. CPG will be focused on short- vs. long-term risk reduction. CPG will emphasize cost-benefit analysis in knee of the curve analysis.

Next Month's Meeting

Fish data presentation

Benthic assessment to be presented in May.